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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,957	12/30/2003	Ingo Zenz	6570P018	8586

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EXAMINER	
PARDO, THUY N	

ART UNIT	PAPER NUMBER
2168	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

mn

Office Action Summary	Application No.	Applicant(s)	
	10/749,957	ZENZ, INGO	
	Examiner	Art Unit	
	Thuy N. Pardo	2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 November 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. In view of the Appeal Brief filed on February 15, 2007, PROSECUTION IS HEREBY REOPENED. New grounds of rejection set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

TIM VO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 18 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Brady, Jr. et al. (Hereinafter "Brady"), US Patent Application Publication No. 2006/0010438.

As to claim 1, Brady teaches the invention substantially as claimed, comprising:

storing a configuration for a distributed environment in a central storage of the distributed environment [a system configuration data file (SCDF) that contains data representing current and previous LRU configurations, 0017; fig. 4b; 0025; 0102]; and

updating a portion of the configuration in the distributed environment [for updating software configurations of line-replaceable unit (LRU), ab; fig. 8-9; then updates in step 3060 a portion of the SCDF with the data of the configuration file CFn, 0099; 5070-5080 of fig. 5; 0101-0109].

As to claims 18 and 25, all limitations of these claims have been addressed in the analysis of claim 1 above, and these claims are rejected on that basis.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 2-6, 10, 11, 17-22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brady, Jr. et al. (Hereinafter "Brady"), US Patent Application Publication No. 2006/0010438 in view of E et al. (Hereinafter "E"), US Patent Application Publication No. 2004/0019639.

As to claim 2, Brady teaches the invention substantially as claimed, with the exception of acquiring a lock for the portion of the configuration in a first node in the distributed environment, modifying the portion of the configuration, invalidating a representation of the portion of the configuration in the distributed and releasing the lock although it has the same functionality of updating individual LRU [fig. 5; 0074]. E teaches acquiring a lock for the portion of the configuration in a first node in the distributed environment [locks to multi-threaded processes for portions of the distributed data, ab; lock 114 to primary data portion 210, see fig. 3A-3C of process 106 in the node 150 of fig. 2; 0018-0021; 0036-0051]; modifying the portion of the configuration [modified portion of local data; 0060; 0062; 0071; 0103]; invalidating a representation of the portion of the configuration in the distributed environment [providing locked access to distributed data in a distributed system, 0073; other processes may be prevented from accessing the locked portion, 0042; 500-530 of fig. 6]; and releasing the lock [releases the lock to the distributed store, 530 of fig. 6; ab; 0051]. Therefore, it would have been

obvious to one of ordinary skill in the Data Processing art at the time of the invention to add the feature of E to the system of Brady as an essential means to increase the efficiency of the locking access to distributed data while updating portion of the configuration in the distributed environment.

As to claim 3, Brady and E teach the invention substantially as claimed. E further teaches:

updating a database to reflect modifications of a portion of the configuration [update primary data portion, see fig. 3C, 5B; 0060-0062; 0071; 0077; 0103]; and

blocking reads of the configuration during the updating [other processes may be prevented from accessing the locked portion, 0042].

As to claim 4, Brady and E teach the invention substantially as claimed. E further teaches notifying nodes in the distributed environment of the updated configuration data [notify the local data manager, 0048-0052].

As to claim 5, Brady and E teach the invention substantially as claimed. E further teaches that the lock is cluster wide [locks to processes for portions of primary data while a process holds a lock for a portion of primary data, other processes may not access the locked portion, 0011].

As to claim 6, Brady and E teach the invention substantially as claimed. E further teaches writing changes to a shared database [update primary data 112 in distributed store 110 of fig. 3C].

As to claim 10, Brady and E teach the invention substantially as claimed. E further notifying registered listeners that the configuration has been changed [a thread requiring access to the distributed data portion may notify the local data manager. The local data manager may increment the count in response to the notification. If a thread finishes accessing the distributed data portion, the thread may notify the local data manager that it has finished. The local data manager may decrement the count in response to the notification that the thread has finished, 0048-0049].

As to claims 11 and 17, these claims are corresponding apparatus claims of claim1-6 and 10; therefore, they are rejected under the same rationale. E further teaches a instance of a configuration manager [0011; 0034; 0040-0045].

As to claims 18-22 and 24, all limitations of these claims have been addressed in the analysis 1-6, 10, 11 above, and these claims are rejected on that basis.

4. Claims 7, 8, 12-14, 23 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brady, Jr. et al. (Hereinafter "Brady"), US Patent Application Publication No. 2006/0010438 in view of E et al. (Hereinafter "E"), US Patent Application Publication No.

2004/0019639, and in further view of Vahalia et al. (Hereinafter "Vahalia") US Patent Application Publication No. 2005/0251500.

As to claim 7, Brady and E teach the invention substantially as claimed, with the exception of changing a configuration object in a branch of a tree structure although it has the same functionality of obtaining a lock on a portion of an application in a distributed environment. Vahalia teaches changing a configuration object in a branch of a tree structure [see 161-168 of fig. 9; 162-185 of fig. 10; fig. 13-15, 22; 0105; 0111; 0167-0168].

Therefore, it would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to add Vahalia's features to the Brady-E's system as an essential means to recognize the location of updated objects in the tree structure to exclusively access to that specified updated object in the file system.

As to claim 8, Brady, E and Vahalia teach the invention substantially as claimed. E further teaches distributed sessions may be distributed among multiple servers, for example in a cluster [0008; 0035], and Vahalia further teaches sending a cache invalidation event to another node in the cluster [0167; 0127-0133].

As to claim 12, Brady, E and Vahalia teach the invention substantially as claimed. Vahalia further teaches a configuration cache [330, 323, 324 of fig. 18] and a configuration handler [0123-0125].

As to claim 13, Brady, E and Vahalia teach the invention substantially as claimed. Vahalia further teaches a persistency handler [0123-0125].

As to claim 14, Brady, E and Vahalia teach the invention substantially as claimed. Vahalia further teaches a configuration handler to permit access to and modification of the configuration [0123-0125].

As to claim 23, this limitation has been addressed in the analysis of claim 8 above, and this claim is rejected on that basis.

As to claim 27, this limitation has been addressed in the analysis of claims 12-14 and 23 above, and this claim is rejected on that basis.

5. Claims 9, 15, 16 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brady, Jr. et al. (Hereinafter "Brady"), US Patent Application Publication No. 2006/0010438 in view of E et al. (Hereinafter "E"), US Patent Application Publication No. 2004/0019639 and in further view of Applicant's Admission of Prior art.

As to claim 9, E teaches the invention substantially as claimed, with the exception of a plurality of Java 2 Enterprise Edition (J2EE) although it has the same functionality of using user-specific states including persistent objects that handle to Enterprise Java Bean [see 0008]. However, the Applicant's Admission of Prior art teaches that in a J2EE environment, the

business layer, which handles the core business logic of the application, is comprised of Enterprise Java Bean (EJB") components with support for EJB containers [0007]. It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to add this feature to the system of E as an essential means to develop portable, robust, scalable and secure server-side Java applications by building on the solid foundation of Java SE, Java EE provides web services, component model, management, and communications APIs that make it the industry standard for implementing enterprise class service-oriented architecture (SOA) and Web 2.0 applications.

As to claims 15 and 26, all limitations of these claims have been addressed in the analysis above, and these claims are rejected on that basis.

As to claim 16, Brady, E and Vahalia and Applicant's Admission of Prior art teach the invention substantially as claimed. E further teaches that some of the persistent objects [0034], and Vahalia further teaches caching client attribute data and file attribute data [0066; 0131].

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy N. Pardo whose telephone number is 571-272-4082. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached on 571-272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thuy N Pardo
Primary Examiner
Art Unit 2168

THUY N. PARDO
PRIMARY EXAMINER